

of birds' eggs exhibiting some abnormalism, Mr. Jacobs presents us with the results of his studies of one hundred and ten sets of eggs varying in whole or part from the normal in size, shape, or color. The four hundred and thirty-three eggs included in the one hundred and ten sets are tabulated in such manner as best to illustrate their departure from the normal, and under the heads of 'Time of Deposition,' 'Age of Females,' and 'Fertility of Contents' the author discusses the probable causes of abnormalism, giving much interesting and suggestive information. The paper is to be welcomed as an effort to raise the standard of contributions to oölogical literature, which too often consist of mere enumeration of sets and tables of measurements.—F. M. C.

Rowley's 'Art of Taxidermy.'¹—The origin of the art of taxidermy in this country could doubtless be traced to the establishment of Henry A. Ward of Rochester. Having among his customers museums, colleges, and other scientific institutions, which both demanded and could afford to pay for high-class material, the specimens leaving his shops were prepared after the latest and most approved methods. The house of H. A. Ward & Co. consequently became a school for taxidermists and when our museums first added taxidermists to their corps of assistants the positions were often filled with Ward's pupils. Thus W. T. Hornaday at the United States National Museum, and through him the late Jenness Richardson at the American Museum of Natural History, secured posts where, unhampered by commercial considerations, they could give free rein to their ambition as taxidermic artists. With the results of their work as it is displayed in their respective museums, the interested public is fully acquainted. In Hornaday's case there resulted not only series of beautifully mounted animals but a work on taxidermy² which adequately represented the development of the subject treated at the time of its publication.

About these two centers of activity in museum taxidermy there was gathered a force of assistants who were given every opportunity for study and experimentation. Among these was Mr. John Rowley who, as one of Richardson's aids at the American Museum of Natural History, developed such marked talent for his chosen calling that on the lamented death of his chief, in 1893, Rowley was called on to fill his position.

¹The Art | of Taxidermy | By | John Rowley | Chief of the Department of Taxidermy in the | American Museum of Natural History, New York City; | Member of the New York Zoölogical Society, etc. | [quotation, seal] | Illustrated with twenty full-page plates | and fifty-nine drawings in the text | New York | D. Appleton and Company | 1898. 12 mo. pp. xi + 244, pll. xx, cuts 59. \$2.00.

²Taxidermy and Zoölogical Collecting. Scribner's Sons.

Since that time Mr. Rowley, assisted by a trained staff, has added many noteworthy examples of taxidermic art to the museum collections, the most effective of which is the group of moose, doubtless one of the finest pieces of taxidermy in this country.

In its preparation Mr. Rowley visited the region represented, and the bounds of his experience include many such expeditions to the lands of the animal afterward to be mounted in his laboratory. The book he has written reflects the wide scope of his training. It is arranged in eight chapters. The first treats of field-work, the outfit, hunting, trapping, etc; the second, of tools and materials; the third, of casting; the fourth, of birds; the fifth, of mammals; the sixth, of fish, reptiles, and crustaceans; the seventh, of skeletons; the eighth, of the reproduction of foliage for use as accessories in groups; and an appendix gives the names of reliable firms from whom taxidermists' supplies may be purchased.

Mr. Rowley's distinguishing characteristics as a taxidermist are patience and originality. His methods are for the most part his own. Instead of the excelsior, clay-covered mannikin, described by Hornaday, he makes a model of gauze-wire covered with plaster composition, practically as hard and dry as marble. Over it he places, not a pickle-soaked, and often discolored skin, but a tanned hide whose colors have not been subjected to the action of chemicals. Thus shrinking, split-seams, and cracking are things of the past. Photographers should note Mr. Rowley's suggestion to use formalin in hardening gelatin films, while his chapter on artificial foliage describes satisfactorily for the first time the manner in which the accessories of our modern groups are produced. In short, this book fully presents the unequalled advance which has been made in the art of taxidermy during the last decade, and as such it must at once replace all other works relating to the subject.—F. M. C.

Birds of Los Angeles Co., Calif.¹—In his introduction the author states that the "present list, with the accompanying notes, is the result mainly of observations made by members of the Southern Division of the Cooper Ornithological Club, and cover little more than the past six or eight years." He is commendably conservative, entering only those species whose occurrence is beyond doubt, and submitting all difficult questions of identification for expert opinion. The list is therefore authoritative. It includes 300 species and subspecies, all being concisely annotated.—F. M. C.

¹ Birds of the Pacific Slope of Los Angeles County [Calif.], A List with Brief Notes. By Joseph Grinnell, A. B., Assistant Instructor in Biology, Throop Polytechnic Institute. Publication No. 2, Pasadena Academy of Sciences. 8vo. pp. 52. Press of G. A. Sweedfeger, Pasadena, California. March, 1898.